



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/785,653

02/23/2004

Jack Bitterly

650003.14769

2690

7590 11/29/2007  
SoCal IP Law Group LLP  
310 N Westlake Blvd Suite 120  
Westlake Village, CA 91362

EXAMINER

MANOHARAN, VIRGINIA

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

11/29/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/785,653

Applicant(s)

BITTERLY ET AL.

Examiner

Virginia Manoharan

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Claims 19-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a). The claimed language "the shells about a common axis" in claim 20 is ambiguous.
- b). Claim 19 does not differ substantially with claim 20 as far as the method steps are concerned.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lichtenthaeler (1,819,517) in view of Schnitzer (3,904,122) and Hervet (2,995,612).

The above references to Lichtenthaeler and Schnitzer are applied for the same combined reasons as set forth at page 4, first and second full paragraph of the previous Office Action. To incorporate to Lichtenthaeler's process the known method

"wherein the rotation of the concentric shells is at a angular velocity sufficient for any liquid on the inner surface to form a film along the inner surface due to g forces on the liquid generated by the rotation of the shells" in claim 19 would have been obvious to one of ordinary skill in the art as suggested by Hervert, noting, e.g., col. 4, lines 1-22. See also claim 20.

Applicants' arguments filed September 14, 2007 have been fully considered but they are not persuasive.

Applicants' argument that "Lichtenthaeler..... is not a boiler-condenser; it is a Heating System for Liquids". The liquid moves in a circle because it is pumped between cylinders. ..."; and further the argument that " Even though Schnitzer also rotates plates, the plates are not concentric shells" are not persuasive of patentability because of the following reasons:

Contrary to applicants' assertion, page 1, lines 1-16 discloses that

This invention relates to heating systems for use in vaporization processes such as the distillation of liquids, and more particularly to continuously operating systems employing tubes through which the liquid to be heated is forced at high velocity. In one of its aspects, the invention consists in a heating system in which heat is generated by surface combustion and utilized as radiant energy to raise the temperature of liquid circulated in tubes.

An important application of the invention is to the distillation of petroleum or the like and the system of my invention is herein disclosed as constructed and arranged for use in this connection.

the invention consists in thereby referring to "distillation. An artisan would appreciate that "distillation" would necessarily includes a combination of boiler and condenser. Moreover, the argued additional feature of "The

liquid moves in a circle because it is pumped between cylinders" although not required by the claims, is not excluded therefrom. Furthermore, while Schnitzer's plates are not concentric shells as argued, however Lichtenthaeler, not Schnitzer was cited to show that concentric shells are not unobvious subject matter nor is it evidence of criticality in the art. See page 1, lines 70-91 of Lichtenthaeler.

The argument relative to the alternative reference to Moss is moot since this reference has been dropped from the rejection, *supra*.

Thus, in the absence of anything which may be "new" or "unexpected result," a *prima facie* case of obviousness has been reasonably established by the art and has not been rebutted. Unexpected results must be established by factual evidence. Mere arguments or conclusory statements in the specification, applicants' amendments, or the Brief do not suffice. *In re Linder*, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1872). *In re Wood*, 582, F.2d 638, 642, 199 USPQ 137, 140 (CCPA 1978).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a). Bethge discloses a device for evaporation of liquid and condensation of vapor formed.

b). Levedahl discloses a heat pipe for low thermal conductivity fluids.

Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is 571-272-1450.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola, can be reached on 571-272-1444.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
VIRGINIA MANOHARAN  
PRIMARY EXAMINER  
ART UNIT 1831-247